Message

From: Tonnesen, Gail [Tonnesen.Gail@epa.gov]
Sent: 4/14/2015 3:49:02 PM
To: huys@clarkcountynv.gov; Paul.Fransioli@ClarkCountyNV.gov; Hoag, Katherine [Hoag.Katherine@epa.gov]; Bohnenkamp, Carol [Bohnenkamp.Carol@epa.gov]; Tonnesen, Gail [Tonnesen.Gail@epa.gov]; Payton, Richard [Payton.Richard@epa.gov]; pfister@ucar.edu; brad.pierce@noaa.gov; Patrick.Reddy@dphe.state.co.us; andrew.o.langford@noaa.gov; Matichuk, Rebecca [Matichuk.Rebecca@epa.gov]
Subject: analysis of June 1-3, 2014 stratospheric intrusion

Hi All,

Thanks for volunteering to work on the analysis of the June 1-3 2014 event, and sorry I've been slow kicking this off.

Hopefully you were able to access the share point page – if not, please let me know.

One goal is to identify the most useful data sets and analyses so that we can develop an analysis with less time and effort. Please take a look at the EPA Technical Support Document (TSD) for the WY 2012 approval which summarizes the analyses that EPA found especially useful. I also listed these below. If you have comments or suggestions for deletions or additions, please reply to all. I'd like to develop and outline of recommended plots, and then see if we can complete some of these analyses before the call next Tuesday.

Brad – some of the tools that you've been developing might be especially useful and I'd appreciate your suggestions on which to include.

The Wyoming SI EE submission, EPA TSD and EPA concurrence letter are all near the bottom of this page:

http://www.epa.gov/ttn/analysis/exeventstable.htm

List of plots included in the EPA TSD

Hourly time-series plot of observed O3 (and other monitored data) at each monitor for June 1-3
Daily AQI plots (see Richard's PPT on sharepoint).
GOES total column O3
AIRS Total Column CO and 618 mb CO
Historical data assessment for O3 at the monitor sites.
North American Regional Reanalysis Image
Rapid Refresh (RAP) Model 20-km, 0-hour analysis
RAP 0-hour analysis showing IPV cross-section
NOAA HYSPLIT transport run, back trajectories, showing both vertical and horizontal transport from the intrusion location
RAP 20-km 500 mb heights in meters, 1-PVU blue isolines, 625 mb RH <= 30%, and EPA AQS Daily Max 8-hour O3
700-500 mb lapse rate (color scale) and 625 mb IPV
National Weather Service (NWS) Upper Air Sounding
Upper Air Meteorology Charts
8-hour Ozone Readings Plotted Against Monitoring Site Elevation

Thanks,
Gail
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